Assignment 14

1. Write the difference between Java & JavaScript?

Java	Javascript
Runs on JVM (Java Virtual Machine).	Runs inside web browsers.
A programming language.	A scripting language.
Used for standalone applications and mobile apps.	Used mainly for web development.
Needs compilation into bytecode to run.	Interpreted directly by browsers.

2. Why do we use JavaScript? Why it's so popular (advantages)?

Purpose: JavaScript is mainly used to add interactivity to web pages. It helps in creating dynamic content like animations, form validation, etc.

Popularity: JavaScript is popular because:

- It's easy to learn and integrate with HTML and CSS.

- It's supported by all modern web browsers..

- Enables responsive websites and web applications.

- Used for both client-side and server-side development (Node.js).

3. What are the following methods used to print the output? Give suitable examples for each of the methods & attach the output respectively.

console.log(): Used to print output in the browser's console.

console.log("Hello, World!");

Output: Hello, World! (printed in the browser console)

alert(): Displays an alert box with the message.

alert("Hello, World!");

Output: An alert box appears with the message "Hello, World!".

document.write(): Writes text directly to the webpage.

document.write("Hello, World!");

Output: The text "Hello, World!" is displayed directly on the webpage.

4. Differences between var, let, and const:

Keyword	Definition	Example	Output
Var	Declares a variable with function-scoped or globally scoped	*var x = 10; console.log(x);*	10
Let	Declares a block-scoped variable.	*let y = 20; console.log(y);*	20
Const	Declares a constant that cannot be re-assigned.	*const z = 30; console.log(z);*	30

5. Write a JS Program to add two numbers, which are inserted by the user & print the result of the addition as an output inside the console panel and alert box.Write/Attach the Output.

let num1 = parseInt(prompt("Enter the first number:"));

let num2 = parseInt(prompt("Enter the second number:"));

let sum = num1 + num2;

console.log("The sum is: " + sum); // Output in console

alert("The sum is: " + sum);   // Output in alert box

6. Write a JS Program to print the greatest number among three, which are inserted by the user (Input value should not be a one-digit number). Write/Attach the Output.

let num1 = parseInt(prompt("Enter the first number:"));

let num2 = parseInt(prompt("Enter the second number:"));

let num3 = parseInt(prompt("Enter the third number:"));

if (num1 > num2 && num1 > num3) {

  console.log("The greatest number is: " + num1);

} else if (num2 > num1 && num2 > num3) {

  console.log("The greatest number is: " + num2);

} else {

  console.log("The greatest number is: " + num3);

}